

## TRAITE DE COOPERATION EN MATIERE DE BREVETS

PCT

## NOTIFICATION D'ELECTION

(règle 61.2 du PCT)

Expéditeur: le BUREAU INTERNATIONAL

Destinataire:

Commissioner  
 US Department of Commerce  
 United States Patent and Trademark  
 Office, PCT  
 2011 South Clark Place Room  
 CP2/5C24  
 Arlington, VA 22202  
 ETATS-UNIS D'AMERIQUE  
 en sa qualité d'office élu

Date d'expédition (jour/mois/année) 29 mai 2001 (29.05.01)	
Demande internationale no PCT/EP00/09113	Référence du dossier du déposant ou du mandataire 08966PM668FD
Date du dépôt international (jour/mois/année) 15 septembre 2000 (15.09.00)	Date de priorité (jour/mois/année) 15 septembre 1999 (15.09.99)
Déposant KORN, Christophe etc	

1. L'office désigné est avisé de son élection qui a été faite:

☒ dans la demande d'examen préliminaire international présentée à l'administration chargée de l'examen préliminaire international le:

13 mars 2001 (13.03.01)

☐ dans une déclaration visant une élection ultérieure déposée auprès du Bureau international le:

2. L'élection ☒ a été faite

☐ n'a pas été faite

avant l'expiration d'un délai de 19 mois à compter de la date de priorité ou, lorsque la règle 32 s'applique, dans le délai visé à la règle 32.2b).

Bureau international de l'OMPI 34, chemin des Colombettes 1211 Genève 20, Suisse no de télécopieur: (41-22) 740.14.35	Fonctionnaire autorisé Claudio Borton no de téléphone: (41-22) 338.83.38
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# TRAITE DE COOPERATION EN MATIERE DE BREVETS

## PCT

### RAPPORT DE RECHERCHE INTERNATIONALE

(article 18 et règles 43 et 44 du PCT)

Référence du dossier du déposant ou du mandataire <b>08966PM668FD</b>	<b>POUR SUITE A DONNER</b> voir la notification de transmission du rapport de recherche internationale (formulaire PCT/ISA/220) et, le cas échéant, le point 5 ci-après	
Demande internationale n° <b>PCT/EP 00/ 09113</b>	Date du dépôt international(jour/mois/année) <b>15/09/2000</b>	(Date de priorité (la plus ancienne) (jour/mois/année) <b>15/09/1999</b>
Déposant  <b>EUROPEAN COMMUNITY (EC)</b>		

Le présent rapport de recherche internationale, établi par l'administration chargée de la recherche internationale, est transmis au déposant conformément à l'article 18. Une copie en est transmise au Bureau international.

Ce rapport de recherche internationale comprend 3 feuilles.

☒

Il est aussi accompagné d'une copie de chaque document relatif à l'état de la technique qui y est cité.

**1. Base du rapport**

- a. En ce qui concerne la **langue**, la recherche internationale a été effectuée sur la base de la demande internationale dans la langue dans laquelle elle a été déposée, sauf indication contraire donnée sous le même point.

☐

la recherche internationale a été effectuée sur la base d'une traduction de la demande internationale remise à l'administration.

- b. En ce qui concerne les **séquences de nucléotides ou d'acides aminés** divulguées dans la demande internationale (le cas échéant), la recherche internationale a été effectuée sur la base du listage des séquences :

☐

contenu dans la demande internationale, sous forme écrite.

☐

déposée avec la demande internationale, sous forme déchiffrable par ordinateur.

☐

remis ultérieurement à l'administration, sous forme écrite.

☐

remis ultérieurement à l'administration, sous forme déchiffrable par ordinateur.

☐

La déclaration, selon laquelle le listage des séquences présenté par écrit et fourni ultérieurement ne vas pas au-delà de la divulgation faite dans la demande telle que déposée, a été fournie.

☐

La déclaration, selon laquelle les informations enregistrées sous forme déchiffrable par ordinateur sont identiques à celles du listage des séquences présenté par écrit, a été fournie.

2. ☐ Il a été estimé que **certaines revendications ne pouvaient pas faire l'objet d'une recherche** (voir le cadre I).

3. ☐ Il y a **absence d'unité de l'invention** (voir le cadre II).

**4. En ce qui concerne le titre,**

☒

le texte est approuvé tel qu'il a été remis par le déposant.

☐

Le texte a été établi par l'administration et a la teneur suivante:

**5. En ce qui concerne l'abrégé,**

☒

le texte est approuvé tel qu'il a été remis par le déposant

☐

le texte (reproduit dans le cadre III) a été établi par l'administration conformément à la règle 38.2b). Le déposant peut présenter des observations à l'administration dans un délai d'un mois à compter de la date d'expédition du présent rapport de recherche internationale.

6. La figure **des dessins** à publier avec l'abrégé est la Figure n°

☒

suggérée par le déposant.

☐

parce que le déposant n'a pas suggéré de figure.

☐

parce que cette figure caractérise mieux l'invention.

**4a, 5a** \_\_\_\_\_

☐

Aucune des figures n'est à publier.

# RAPPORT DE RECHERCHE INTERNATIONALE

Demande Internationale No

PCT/00/09113

**A. CLASSEMENT DE L'OBJET DE LA DEMANDE**  
CIB 7 G06K19/077 G09F3/03

Selon la classification internationale des brevets (CIB) ou à la fois selon la classification nationale et la CIB

**B. DOMAINES SUR LESQUELS LA RECHERCHE A PORTE**

Documentation minimale consultée (système de classification suivi des symboles de classement)

CIB 7 G06K G09F G08B E05B

Documentation consultée autre que la documentation minimale dans la mesure où ces documents relèvent des domaines sur lesquels a porté la recherche

Base de données électronique consultée au cours de la recherche internationale (nom de la base de données, et si réalisable, termes de recherche utilisés)

WPI Data, PAJ

**C. DOCUMENTS CONSIDERES COMME PERTINENTS**

Catégorie °	Identification des documents cités, avec, le cas échéant, l'indication des passages pertinents	no. des revendications visées
X	WO 97 38193 A (MITCHELL DAVID SAYERS ; SCAFFTAG LIMITED (GB)) 16 octobre 1997 (1997-10-16)	1-4, 6-10, 14, 19-24, 27-29, 31-34
Y	le document en entier	5, 12, 17, 30
Y	US 5 482 008 A (STAFFORD RODNEY A ET AL) 9 janvier 1996 (1996-01-09)	5
A	colonne 2, ligne 3-28; figure 12 colonne 6, ligne 29 - colonne 8, ligne 21	8-10, 24
Y	EP 0 825 554 A (FYRTECH MICROELECTRONICS AB) 25 février 1998 (1998-02-25) colonne 3, ligne 9 - colonne 4, ligne 58; figures 3,4	12

☒ Voir la suite du cadre C pour la fin de la liste des documents

☒ Les documents de familles de brevets sont indiqués en annexe

° Catégories spéciales de documents cités:

- \*A\* document définissant l'état général de la technique, non considéré comme particulièrement pertinent
- \*E\* document antérieur, mais publié à la date de dépôt international ou après cette date
- \*L\* document pouvant jeter un doute sur une revendication de priorité ou cité pour déterminer la date de publication d'une autre citation ou pour une raison spéciale (telle qu'indiquée)
- \*O\* document se référant à une divulgation orale, à un usage, à une exposition ou tous autres moyens
- \*P\* document publié avant la date de dépôt international, mais postérieurement à la date de priorité revendiquée

- \*T\* document ultérieur publié après la date de dépôt international ou la date de priorité et n'appartenant pas à l'état de la technique pertinent, mais cité pour comprendre le principe ou la théorie constituant la base de l'invention
- \*X\* document particulièrement pertinent; l'invention revendiquée ne peut être considérée comme nouvelle ou comme impliquant une activité inventive par rapport au document considéré isolément
- \*Y\* document particulièrement pertinent; l'invention revendiquée ne peut être considérée comme impliquant une activité inventive lorsque le document est associé à un ou plusieurs autres documents de même nature, cette combinaison étant évidente pour une personne du métier
- \*Z\* document qui fait partie de la même famille de brevets

Date à laquelle la recherche internationale a été effectivement achevée

21 décembre 2000

Date d'expédition du présent rapport de recherche internationale

03/01/2001

Nom et adresse postale de l'administration chargée de la recherche internationale  
Office Européen des Brevets, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
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Fonctionnaire autorisé

Cardigos dos Reis, F

# RAPPORT DE RECHERCHE INTERNATIONALE

Demande Internationale No

PCT/00/09113

## C.(suite) DOCUMENTS CONSIDERES COMME PERTINENTS

Catégorie	Identification des documents cités, avec, le cas échéant, l'indication des passages pertinents	no. des revendications visées
Y	US 1 997 301 A (ANDREW O. BRADFORD) 9 avril 1935 (1935-04-09) figures 4,5 ----	17,30
A	CH 656 582 A (SOPLEX SOCIETE DE PERSONNES A) 15 juillet 1986 (1986-07-15) page 2, ligne 65 -page 3, colonne 7 ----	20,21
A	US 4 727 668 A (ANDERSON PHILIP M ET AL) 1 mars 1988 (1988-03-01) revendications 1-6 ----	20-22
A	EP 0 897 662 A (INNOTEK PET PRODUCTS INC) 24 février 1999 (1999-02-24) alinéa '0021!; figure 2 ----	32,33
A	US 4 523 186 A (FIARMAN SIDNEY) 11 juin 1985 (1985-06-11) colonne 1, ligne 14 -colonne 2, ligne 24 -----	34

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/00/09113

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9738193 A	16-10-1997	AU 2516197 A CA 2251679 A EP 0892880 A US 5992663 A	29-10-1997 16-10-1997 27-01-1999 30-11-1999
US 5482008 A	09-01-1996	AT 137912 T AU 2502992 A DE 69210832 D EP 0608250 A ES 2089556 T IE 57789 B WO 9305648 A	15-06-1996 27-04-1993 20-06-1996 03-08-1994 01-10-1996 07-04-1993 01-04-1993
EP 0825554 A	25-02-1998	AU 4204797 A WO 9807116 A EP 0919040 A	06-03-1998 19-02-1998 02-06-1999
US 1997301 A	09-04-1935	NONE	
CH 656582 A	15-07-1986	BE 895867 A DE 8403776 U LU 85205 A	10-08-1983 30-05-1984 26-10-1984
US 4727668 A	01-03-1988	DE 3677558 D EP 0214440 A JP 62064725 A	28-03-1991 18-03-1987 23-03-1987
EP 0897662 A	24-02-1999	US 5984875 A EP 0898882 A US 6059733 A US 6099482 A	16-11-1999 03-03-1999 09-05-2000 08-08-2000
US 4523186 A	11-06-1985	NONE	

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Translation

PATENT COOPERATION TREATY

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## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 08966PM668FD	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP00/09113	International filing date ( <i>day/month/year</i> ) 15 September 2000 (15.09.00)	Priority date ( <i>day/month/year</i> ) 15 September 1999 (15.09.99)
International Patent Classification (IPC) or national classification and IPC G06K 19/077		
Applicant EUROPEAN COMMUNITY (EC)		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.  <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of <u>5</u> sheets.
3. This report contains indications relating to the following items:  I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input checked="" type="checkbox"/> Certain defects in the international application VIII <input checked="" type="checkbox"/> Certain observations on the international application

Date of submission of the demand 13 March 2001 (13.03.01)	Date of completion of this report 19 March 2002 (19.03.2002)
Name and mailing address of the IPEA/EP  Facsimile No.	Authorized officer  Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP00/09113

## I. Basis of the report

1. This report has been drawn on the basis of (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

☒ the international application as originally filed.

☐ the description, pages 1-18, as originally filed,  
pages \_\_\_\_\_, filed with the demand,  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☐ the claims, Nos. \_\_\_\_\_, as originally filed,  
Nos. \_\_\_\_\_, as amended under Article 19,  
Nos. \_\_\_\_\_, filed with the demand,  
Nos. 1-34, filed with the letter of 29 November 2001 (29.11.2001),  
Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☐ the drawings, sheets/fig 1-9, as originally filed,  
sheets/fig \_\_\_\_\_, filed with the demand,  
sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

2. The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/fig \_\_\_\_\_

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability:  
citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1-34	YES
	Claims		NO
Inventive step (IS)	Claims	1-34	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-34	YES
	Claims		NO

## 2. Citations and explanations

corrected

Reference is made to the following documents:

D1: WO 97/38193

D2: US-A-5 482 008

D3: US-A-1 977 301 cited by the IPEA examiner

D4: EP-A-0 825 554

D5: US-A-4 523 186

D6: EP-A-0 897 662

Document D3 was not cited in the international search report.

1. The present invention relates to a sealed system whereby objects to be identified over time can be marked (e.g. for monitoring the routing and/or storage of nuclear materials or equipment).

The resulting problem is that it is not possible to tell immediately and without opening the sealed system whether an attempt has been made to open same. The solution proposed in the application involves providing the sealed system with remotely accessed electronic means (e.g. a passive



transponder) suitable for containing a system identifier. The closure means comprise a "male" portion and a "female" portion that are located at the edge of the capsules and can be snapped together.

2. None of the cited documents discloses or suggests a closure system such as that of claims 1 and 23.

## VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

- corrected
1. Documents D1, D2, D3, D4, D5 and D6 have not been cited in the description (PCT Rule 5.1(a)(ii)).
  2. The independent claims have not been drafted in two parts (PCT Rule 6.3(b); the description should contain an indication of the document in relation to which the claims have been delimited).

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Although claims 1 and 23 have been drafted as separate independent claims, it appears that they have the same subject matter and that they differ only by virtue of a variation in the definition of the subject matter for which protection is sought, and the terms used to define the features thereof. Therefore, these claims are not concise.

10/070414



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PATENT TRADEMARK OFFICE

JG13 Rec'd PCT/PTO 15 MAR 2002

**TRANSLATION OF**

**ANNEXES**

**TO IPER**

**FOR**

**PCT/BE00/00103**

**CLAIMS**

1/ A system for sealing, comprising:

- a first capsule (20);
- a second capsule (30);
- 5     • electronic means (23, 33), for placing in at least one of the capsules, and capable of containing an electronic identity that is remotely interrogatable; and
- closure means (25-1, 25-2, 25-3, 25-4; 35-1, 35-2, 35-3, 35-4), to seal the two capsules together, comprising at least a male portion  
10     situated at the periphery of one of the capsules, and at least a female portion situated at the periphery of the other capsule, the two portions snap-fastening together.

2/ A system according to claim 1, the capsules being provided with indicators to indicate breakage or deformation.

- 15     3/ A system according to claim 1 or claim 2, said male portion (25-1, 25-2, 25-3, 25-4) and female portion (35-1, 35-2, 35-3, 35-4), co-operating in such a manner as to form an assembly that can be opened only by force.

4/ A system according to any one of claims 1 to 3, the closure means including at least one tenon and mortise assembly.

5/ A system according to any one of claims 1 to 4, the two capsules are being substantially cylindrical in shape, one of the capsules (20) having a rib (26) which co-operates with a groove (36) formed in an inside surface of the other capsule (30):

5        6/ A system according to any one of claims 1 to 5, the closure means of the two capsules defining a single closure position.

7/ A system according to claim 6, the closure means being separated around the two capsules and defining angles between one another, at least two of the angles being different.

10       8/ A system according to any one of claims 1 to 7, the electronic means (23, 33) being passive electronic means.

9/ A system according to any one of claims 1 to 8, the electronic means (23, 33) being programmable electronic means.

10/ A system according to any one of claims 1 to 9, the electronic means  
15 (23, 33) comprising at least one electronic transponder capable of being encoded digitally.

11/ A system according to claim 10, including two passive electronic transponders capable of being encoded digitally.

12/ A system according to any one of claims 1 to 11, the electronic means (23, 33) including one or more wires (52) suitable for being broken by the system 5 being opened after the system has once been closed.

13/ A system according to any one of claims 1 to 12, further comprising means (32) enabling the system to be fixed to an external device.

14/ A system according to claim 13, further comprising means (40) for fixing it to an external device.

10 15/ A system according to any one of claims 1 to 14, including at least one opening (82-84) for passing a cord (40) and cord-locking means for locking the cord inside the system once it has been inserted therein and the system has been sealed.

16/ A system according to claim 15, the cord-locking means comprising at 15 least one rib (86, 88) formed in one of the capsules.

17/ A system according to any one of claims 1 to 14, one of the capsules including first and second orifices (82-85) for inserting a cord, the other capsule

including first and second ribs (86, 88) which press against the cord when the two capsules are sealed together.

18/ A system according to claim 17, the first and second ribs defining a groove (24) for receiving electronic means suitable for containing an electronic  
5 identity and suitable for being interrogated remotely.

19/ A system according to any one of claims 1 to 14, including first and second cord-insertion orifices (82-85) and first and second internal ribs which press against the cord when the capsules are sealed together.

20/ A system according to any one of claims 1 to 19, the capsules (20, 30)  
10 being made of plastics material.

21/ A system according to any one of claims 1 to 20, the capsules (20, 30) being made of a material that presents plastic deformation characteristics.

22/ A system according to claim 21, the material comprising at least 25% ABS.

15 23/ A seal system comprising a first capsule (20) and a second capsule (30), and electronic means (23, 33) disposed in at least one of the capsules, the electronic means containing at electronic identity and being suitable for being



interrogated from outside the seal system, the two capsules being sealed together by means of at least a male portion situated at the periphery of one of the capsules, and at least a female portion situated at the periphery of the other capsule, the two portions snap-fastening together.

5           24/ A seal system according to claim 23, the electronic means (23, 33) comprising at least one passive electronic transponder.

25/ A system according to claim 24, including a passive electronic transponder in each of the capsules.

26/ A system according to claim 25, the two transponders being disposed  
10   perpendicularly relative to each other.

27/ A seal system according to any one of claims 23 to 26, the system including first and second orifices (32, 82, 83) for passing a cord (40).

28/ A seal system according to any one of claims 23 to 27, further comprising a cord (40) for fixing the seal system.

15           29/ A seal system according to claim 28, the cord being locked in a system of without using a knot.

30/ A system according to claim 28 or claim 29, the cord being locked in the seal system between a wall of one of the capsules and a rib (86, 88) or a shoulder (86-1, 86-2, 88-1, 80-2) of a rib (86, 88) formed in the other capsule.

31/ A method of inspecting a seal system according to any one of claims 23 to 30 in which a reader device (42) is brought up to the seal, a wave is sent to the system, and a wave transmitted by the system is received, which wave contains information concerning the electronic identity.

32/ A method according to claim 31, the reader device including a storage means, and means for manually inputting data.

10 33/ A method according to claim 31 or claim 32, the data concerning the electronic identity information being transferred to a computer (70).

34/ A method according to any one of claims 31 to 33, the seal system being attached to a container (72) containing nuclear material, or electrical material, or foodstuff.